

# EXHIBIT 9

**Scope of work:**

I was asked by attorney Lindsey Lien to review the medical records of Colin Strub to determine if the Salmonella infection that he was diagnosed with on 6/29/20 caused symptoms of irritable bowel syndrome to develop afterwards.

**Records reviewed:**

1. Office notes, EGD and colonoscopy by Dr. Siegel 2020-2021
2. Office notes Dr. Isaac Pierre 2022
3. Office notes Dr. Hannah Kraus 2022

**Qualifications:**

I am a board-certified gastroenterologist with over twenty years of experience in this subspecialty. I became a licensed medical doctor in 1998, and I have obtained medical licenses in Connecticut, New York, and Virginia. My only current active medical license is in the state of Virginia. I became board certified in gastroenterology in 2001, and these any other credentials are more specifically outlined in the Curriculum Vitae.

I am a full-time practicing partner with Gastroenterology Associates, P.C., a private, nine-physician gastroenterology practice with locations in Manassas, Gainesville, and Warrenton, Virginia. I am very familiar with the symptoms, diagnosis, and treatment of post-infectious irritable bowel syndrome. All of my opinions are based upon my education, training, experience, knowledge, skill and review of the pertinent records and literature, and offered with a reasonable degree of medical probability and certainty. I have no financial interest in the outcome of this case, nor personal affiliation with any of the parties.

**Summary of Case:**

1. In 2020, Mr. Strub was a 42-year-old white male with a history of GERD who noticed diarrhea sometime before 6/26/20 (this information obtained from a text message Mr. Strub sent to Dr. Schultz on 6/26/20 at 703a). My own phone interview with Mr. Strub on 4/18/23 confirms that he had had diarrhea for about one week prior to his diagnosis of Salmonella infection. He denied rectal bleeding, abdominal pain, or fever at the time.
2. Stool culture 6/29/20 showed Salmonella.
3. Stool PCR 7/8/20 showed Salmonella species, not typhi.
4. Stool culture 7/24/20 negative for Salmonella.
5. SIBO breath test 10/13/20 negative.
6. Stool culture 12/31/20: No Salmonella.
7. EGD 12/16/20 with Dr. Daniel Siegel (Denver Digestive Health Specialists) for dysphagia, epigastric and chest pain shows a small hiatal hernia. Schatzki's ring dilated with a 48 Fr Savary dilator. Biopsy of the GE junction showed small focus of intestinal epithelium of Barrett's esophagus.
8. Office visit with Dr. Siegel on 2/2/21: atypical chest pain and shortness of breath, worse with activity. Positive for bloating, burping, epigastric pain. No heartburn, change in bowel movements, bright red blood per rectum, weight loss. Taking proton pump inhibitor correctly (Omeprazole 40 mg po bid).
9. 24-hour pH impedance study on 2/10/21 with Dr. Siegel: Normal esophageal acid exposure.

10. Office visit with Dr. Siegal 3/24/21: He has bloating, and his stools are very variable consistency and incomplete evacuations. Satiety but no weight loss. Recommendation to start Elavil 10 mg po qhs, decrease Omeprazole to 40 mg po qd, and to schedule a colonoscopy.
11. Colonoscopy 5/5/21 with Dr. Siegel: 4mm hyperplastic descending colon polyp. Random biopsies negative for microscopic colitis.
12. Office visit 8/27/21 with Dr. Hanna Kraus (gastroenterologist): abdominal bloating since Salmonella diagnosis consistent with post infectious irritable bowel syndrome. Recommend trial of FODMAP diet, probiotics, psyllium. Will also refer for anti-reflux surgery.
13. CT angio chest, abdomen and pelvis 11/12/21 for chest pain: unremarkable.
14. Laparoscopic hiatal hernia repair and LINX anti-reflux insertion 11/22/21.
15. Celiac serology 2/7/22 negative.
16. Fecal calprotectin 2/11/22 negative.
17. Stool culture 2/11/22 negative.
18. Office visit 2/28/22 with Dr. Isaac Pierre: Loose stools and intermittent constipation. Most likely IBS.
19. Office visit 3/1/22 with Dr. Pierre: Loose stools and intermittent constipation. Most likely IBS.

**Background information:**

1. Irritable bowel syndrome (IBS) is characterized by chronic abdominal pain and altered bowel habits. According to the Rome IV criteria, IBS is defined as recurrent abdominal pain, on average, at least one day per week in the last three months, associated with two or more of the following criteria: related to defecation; associated with a change in stool frequency, and associated with a change in stool form (appearance). The diagnosis of IBS is often established after exclusion of other causes of abdominal pain and change in bowel habits.
2. Post-infectious irritable bowel syndrome (PI-IBS) is a condition that affects some people who have had a bacterial or viral infection in their gastrointestinal tract, such as salmonella. For study and standardization purposes, some experts define post-infectious IBS as the acute onset of new IBS symptoms in an individual who has not previously met the Rome criteria for IBS immediately following an acute illness characterized by 2 or more of the following: fever, vomiting, diarrhea, or a positive bacterial stool culture.
3. PI-IBS can cause symptoms such as abdominal pain, bloating, diarrhea, constipation, and a feeling of incomplete bowel movements. These symptoms can persist for weeks, months, or even years after the initial infection has resolved.
4. There is no cure for PI-IBS, but there are ways to manage the symptoms. Treatment options include dietary changes, such as avoiding foods that trigger symptoms, increasing fiber intake, and avoiding large meals. Medications, such as antispasmodics, laxatives, or probiotics may also help to relieve symptoms.

**Expert Opinion:**

Colin Strub's change in bowel habits and abdominal pain following his Salmonella infection are more likely than not due to post-infectious irritable bowel syndrome. This conclusion is based on the following:

- a) Mr. Strub did not have IBS symptoms prior to the Salmonella infection.
- b) Mr. Strub had an acute illness in June 2022 associated with diarrhea and a stool culture and stool PCR that detected Salmonella.
- c) Mr. Strub developed loose stools, intermittent constipation, and abdominal bloating after his Salmonella infection.
- d) According to notes from Drs. Siegel, Kraus and Pierre, post-infectious IBS was the likely diagnosis for Mr. Strub's symptoms of loose stools and abdominal bloating.
- e) Mr. Strub had a complete workup for abdominal bloating and loose stools after the Salmonella infection, including an EGD, colonoscopy with biopsies, CT scan of the abdomen and pelvis, stool studies for infection and inflammation, 3SIBO breath test and celiac serology. None of these studies showed any significant findings, making it more likely than not that his loose stools, intermittent constipation and abdominal bloating were due to post-infectious IBS.

## **References**

1. Longstreth GF, Thompson WG, Chey WD, Houghton LA, Mearin F, Spiller RC. "Functional bowel disorders." Gastroenterology. 2006;130(5):1480.
2. Mearin F, Lacy BE, Chang L, Chey WD, Lembo AJ, Simren M, Spiller R. "Bowel Disorders." Gastroenterology. 2016 Feb.
3. Robin Spiller, Klara Garsed. "Post-infectious irritable bowel syndrome." Gastroenterology. May 2009. 136: 6 (1979-1988).

Signed,



Dr. Myung Whan Choi, MD

Date 4/26/23